



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/777,674	02/07/2001	Kiichi Ueyanagi	108551	3351

25944 7590 06/23/2003

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
----------	--------------

2653

DATE MAILED: 06/23/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/777,674

Applicant(s)

UEYANAGI, KIICHI

Examiner

Aristotelis M Psitos

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) 12-65 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 1-7,9-11 and 66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2653

1. Applicant's response of 5/12/03 has been considered with the following results.

Claims 12- 65 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions/species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 5.

In accordance with MPEP 808.01 (a) and that since NO allowable generic claim has been found (see action on the merits below), the restriction is proper. Stated another way, if an allowable generic claim is found, then a reasonable number of species would be rejoined since the no reason to insist upon the species election would be maintained.

The restriction requirement was made FINAL in the last Office action. Such a position is maintained.

With respect to claim 56, in accordance with MPEP §821, because this claim does not read upon the elected species, it is withdrawn from consideration and the previous position taken under 35 USC 112 (paragraph 2) is not maintained.

The examiner cannot ignore the claimed limitation of a shading element contained in this claim.

With respect to new claim 66, although applicant has failed to identify which species this claim read on, the examiner interprets such to read on the elected species. If this is not the case, it too will be treated in accordance with MPEP §821

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-2, 11 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Nakao et al further considered with Smith or Bell considered with Rottmayer et al.

Nakao et al is relied upon for the reasons stated in the previous OA, notable see figure 14.

Art Unit: 2653

to claim 1, that is replacing the position of the magnetic coils/transducer closer to/in contact with the laser and hence the gap(s) is/are appropriately located.

With respect to the limitations of claim 4, the gap is smaller than the spot diameter of the laser beam.

It would have been obvious to modify the base system of the references to either Nakao et al/Smith or Bell/Rottmayer et al with the above teachings from Biscoff et al, motivation is to make the overall structure small in footprint/size.

With respect to claim 9, the laser in Nakao et al or Bell is interpreted as being an edge type.

With respect to claim 5, the examiner interprets the coil arrangement of Nakao et al to include plural windings, and hence meeting this limitation. Alternatively Smith teaches plural windings for his coil arrangement, and use of such plural windings is considered obvious in order to properly generate a magnetic field of sufficient strength – i.e., the relation ship between number of coils and magnetic field strength.

It would have been obvious to modify the base system of Nakao et al as further modified (relocation of elements) and further with the above teaching from Smith to increase the magnetic field strength of the final output signal.

6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 above, and further in view of Ishii et al.

With respect to claims 6 and 7, although the shape of the coil arrangement is not specified in the Nakao et al document, obviously there must be some shape. Selection between different shapes, circular, cylindrical, rectangular is deemed merely a selection between alternative equivalents predicated on the size/shape of the desired magnetic field and further taught by the Ishii document.

It would have been obvious to modify the base system of either Nakao et al as further modified with the relocation of elements/parts and Smith or Bell/Rottmayer et al and each further with the above teaching from Ishii with respect to the shape of the coil motivation is to select a shape of the final magnetic field to a desired shape since no unexpected results are seen to occur from field shape selection.

Art Unit: 2653

Smith at fig. 4 does depict the newly inserted language with respect to the pair of poles and gap as a thin film coil arrangement in this environment.

It would have been obvious to modify the base system of Nakao et al with the above teachings from Smith; motivation is to have an integral mo head of small size.

Bell at fig.11 which shows a magnetic circuit stacked onto a laser – element 80 and element 70d respective. The poles and gap are self-evident.

This is not a thin film structure. Nevertheless, thin film magnetic structures/poles & gap are known in this environment as found in Rottmayer et al

It would have been obvious to modify the base system of Bell with the above teaching from Rottmayer et al, motivation being to reduce the overall size of the mo head.

The limitation of claim 66 is also self-evident.

Response to Arguments

Applicant's arguments with respect to claims 1 and 11 have been considered but are moot in view of the new ground(s) of rejection.

Additionally, the argument presented does not define the claimed invention over the art of record.

Since there is a gap in the devices the magnetic field is applied as argued.

With respect to Smith, applicant's attention is drawn to figure 4 which does depict plural poles and a gap there between – poles 312, 318, gap in between.

With respect to Smith provides the mag. head and laser on opposite sides of the record, please note the description of figure 4 as stated in col. 3, lines 47-49.

5. Claims 3-5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1 and 11 above, and further in view of Bischoff et al.

Bischoff et al is cited for teaching a plurality of thin film mo structures in this environment.

With respect to the limitations of claims 3 and 9, the examiner interprets that the gap as recited is indeed placed on the output surface when the modification under 103 purposes stated above with respect

Art Unit: 2653

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 2 above, and further in view of the acknowledge prior art – see MPEP§2144.03 with respect to the use of Official notice.

The vertical cavity surface emitting semiconductor limitation of claim 10 is considered to be of a well know/established type of semiconductor and Official notice is taken thereof.

It would have been obvious to modify the base system as relied upon with respect to claim 2 with the above well know semiconductor type motivation is to use established laser semiconductors and save valuable resources, such as time and money.

Applicant's arguments with respect to claim 10 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claim 8 is allowable over the art of record.

Chen et al, Bell and Mizutani are cited as interest. Chen et al is another mo head arrangement in this environment, while Mizutani is a cavity type laser with a TM mode of operation.

Any inquiries concerning missing papers/references, etc. must be directed to Group 2600 Customer Services at (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Application/Control Number: 09/777,674

Page 6

Art Unit: 2653

Aristotelis M Psitos
Primary Examiner
Art Unit 2653

A handwritten signature in black ink, appearing to read 'APsitos', written over the printed name.

AMP
June 17, 2003

✓